

Enclosure

EPA Comments on Draft Response to October 27, 2022, Diplomatic Note from Mexico Regarding Tijuana River Border Barrier

January 24, 2023

General Comment

The Tijuana River watershed drains an area of 1,750 square miles, roughly the size of Delaware. Even moderate storm events can result in large floods in Tijuana due to the river's inability to drain the area quickly enough. Recent storms in the area (January 14-15, 2023) carried approximately four billion gallons per day through the Tijuana River. These rain events resulted in significant flooding and caused two deaths in Tijuana, increasing EPA's concerns that new structures in the river channel could catch debris and dam the river, exacerbating flooding.

The U.S. Environmental Protection Agency (EPA) has previously expressed to CBP and the International Boundary and Water Commission (IBWC) concerns regarding the potential risk of catastrophic flooding should the proposed lift gate system not operate as planned, potentially leading to severe property damage, damage to infrastructure, and human injury or loss of life. EPA initially expressed these concerns to CBP in writing in September 2020 and more recently on July 20, 2022

Specific Comments

Paragraph 2 states that CBP has been working closely with EPA and Paragraph 3 states the following: *CBP and USIBWC technical reviews of the revised design have shown that the project would not obstruct the flow of water across the boundary.*

Comment:

- EPA disagrees that CBP has been working closely with EPA on the design and planned construction, and operation; please delete this phrase from the diplomatic note response. Furthermore, this statement appears inconsistent with CBP's own analysis of the 100-year storm, which indicates that river levels will rise a few feet due to flow obstruction from the piers of the bridge. Any elevation increases in the river are likely to exacerbate flooding in low-lying streets in Tijuana that drain into the river.
- Although CBP has chosen to waive the National Environmental Policy Act and dozens of other environmental and cultural resource protection laws, EPA believes that a thorough analysis of possible flood risks is critical for this project. Consequently, EPA has contracted researchers from the University of California at Irvine to create a model to examine the impacts to the Tijuana River from both the 100- and 500-year flood event. EPA's study will also examine the impacts on both sides of the border if some or all the gates fail to raise and become blocked by debris. This is consistent with the Federal Flood Risk Management Standard, which requires consideration of future climate change effects under Executive Order (EO) 13690 which states "It is the policy of the United States to improve the resilience of communities and federal assets against the impacts of flooding."

These impacts are anticipated to increase over time due to the effects of climate change and other threats. Losses caused by flooding affect the environment, our economic prosperity, and public health and safety, each of which affects our national security.” EO 13690 requires Federal agencies to protect federally funded buildings and projects from flood risks. The EO provides various methods to do this, including using climate-informed science and designing to the 500-year floodplain.

Paragraph 3 states the following: *Construction of the proposed project would not have any impact on the ability of Mexico to use the channel for flood discharge.*

Comment: This statement appears inconsistent with CBP’s analysis of the 100-year storm event which indicates that river levels will rise a few feet due to the posts of the barrier project. Such an increase in river elevation could exacerbate local upstream flooding in Tijuana, which is already highly prevalent following virtually any size precipitation event. USGS has stated, “In particular, structures that encroach on the floodplain, such as bridges, can increase upstream flooding by narrowing the width of the channel and increasing the channel’s resistance to flow. As a result, the water is at a higher stage as it flows past the obstruction, creating a backwater that will inundate a larger area upstream.” (Source: <https://pubs.usgs.gov/fs/fs07603/>)

Paragraph 4 states the following: *Moreover, the proposed security barrier is designed precisely with the existence and application of Article 17 in mind, so as to allow for unimpeded flow of flood waters through the use of raisable gates that could be quickly lifted during periods of flood, and/or upon notice.*

Comment: While any structure in the Tijuana River will exacerbate flooding, a barrier in the river that fails to open during a storm event could cause catastrophic flooding on both sides of the border. These types of barrier projects within stormwater drainage areas are inherently vulnerable. Examples listed below demonstrate the operational challenges in keeping gates open and free from debris during storm events. As the Tijuana River Watershed encompasses a much larger area and a larger population than those below, consequences could be even more significant.

1. In 2011, in Oregon Pipe Cactus Monument, the gates were not opened during a storm event, which caused a 40’ section of gate to blow out and wash downstream. (Source: <https://www.aclu.org/report/death-damage-and-failure>)
2. In 2014, the floodgates near Nogales, AZ, were not raised, causing floods to sweep away a 60’ section of the fence, sending mud and stones into homes. (Source: Miroff, Nick. “Trump’s border wall, vulnerable to flash floods, needs large storm gates left open for months.” *The Washington Post*, 30 Jan. 2020 and <https://www.aclu.org/report/death-damage-and-failure>)
3. In November of 2019, CBP personnel reported to EPA that a failure for the gate at Stewart’s Drain to be fully raised, combined with a large accumulation of trash, resulted in the flooding of two major wastewater pump stations in Tijuana in addition to other

damage. While the pumps were being repaired, flows of untreated sewage in the Tijuana River resulted in U.S.-side beach closures throughout the summer.

4. In 2021, high flows in Silver Creek, near Douglas AZ, caused the barrier gates to rip from their hinges. The gates were left in an unsafe condition by contractors. (Source: <https://www.borderreport.com/immigration/the-border-wall/monsoon-rains-blast-through-special-border-wall-gates-on-southern-arizona-creekbed/>)